

# WEST Search History

DATE: Wednesday, August 06, 2003

Set Name side by side	Query	Hit Count	Set Name result set				
DB = US	SPT,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ						
L16	12 and 19 and L15	5	L16				
L15	((106/1.18   106/1.23   106/1.26 )!.CCLS. )	830	L15				
L14	12 and 19 and L13	2	L14				
L13	((205/266  205/267  205/268 )!.CCLS. )	277	L13				
L12	12 and 19 and L11	11	L12				
L11	((502/\$)!.CCLS.)	48002	L11				
L10	18 and L9	9	L10				
L9	cysteine or cysteinate	34159	L9				
L8	l2 and L7	301	L8				
L7	((556/110  556/116 )!.CCLS. )	513	L7				
L6	14 and L5	4	L6				
L5	((423/\$)!.CCLS.)	84074	L5				
L4	13 same bath	260	L4				
L3	11 same L2	1323	L3				
L2	gold or au	4786486	L2				
DB=DWPI,USPT,EPAB,JPAB,TDBD; PLUR=YES; OP=ADJ							
Ll	electrodeposition or electro-deposition or electro same deposition	29734	<b>L</b> 1				

END OF SEARCH HISTORY

=> d ibib abs hitstr 1-6

L13 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:745494 CAPLUS

DOCUMENT NUMBER: 136:41706

TITLE: A novel nano-Au-assembled gas sensor for atmospheric

oxygen determination

AUTHOR(S): Li, Hui; Wen, Jingxia; Cai, Qi; Wang, Xiaoli; Xu,

Jiming; Jin, Litong

CORPORATE SOURCE: Department of Chemistry, East China Normal University,

Shanghai, 200062, Peop. Rep. China

SOURCE: Analyst (Cambridge, United Kingdom) (2001), 126(10),

1747-1750

CODEN: ANALAO; ISSN: 0003-2654

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal LANGUAGE: English

AB A novel nano-Au-assembled gas sensor was fabricated and 1st used to det. atm. oxygen. The special characteristics of nano-Au resulted in a high catalytic activity for the redn. of oxygen. On detg. 20.9% oxygen by cyclic voltammetry, on a nano-Au-assembled Pt disk electrode the overpotential decreased greatly and the redn. current of oxygen increased to .apprx.4.4 times that on a bare gas sensor. For the detn. of atm. oxygen by using this novel nano-Au-assembled gas sensor with the amperometric i-t curve method, the linear range was 0.4-30.0%, the linear equation was y = 1.11x - 0.63 with a correlation coeff. of 0.9931, the sensitivity was 1.11 .times. 10-7A cm-2 per 1% vol./vol., the detection limit was 0.2%, the response time was .apprx.12 s and the relative std. deviation was 2.9% on detg. the background value of atm. oxygen. Also the nano-Au-assembled gas sensor had good reproducibility and stability. These results demonstrated that this sensor for the detn. of atm. oxygen was fast, sensitive, accurate and convenient.

IT 52-90-4, Cysteine, uses

RL: ARG (Analytical reagent use); DEV (Device component use); ANST (Analytical study); USES (Uses)

(atm. oxygen detn. by gas sensor based on gold nanoparticle cysteine self-assembled monolayer on platinum disk electrode)

RN 52-90-4 CAPLUS

CN L-Cysteine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 16903-35-8, Gold hydrogen chloride (AuHCl4)

RL: RCT (Reactant); RACT (Reactant or reagent)

(atm. oxygen detn. by gas sensor based on gold nanoparticle cysteine self-assembled monolayer on platinum disk electrode)

RN 16903-35-8 CAPLUS

CN Aurate(1-), tetrachloro-, hydrogen, (SP-4-1)- (9CI) (CA INDEX NAME)

⊕ H +

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:861875 CAPLUS

DOCUMENT NUMBER:

134:34356

TITLE:

Method for producing a cyanide-free solution of a gold

compound that is suitable for galvanic gold baths Hoffacker, Gerhard; Franz, Renate; Reitz, Ramona;

Walter, Richard

PATENT ASSIGNEE(S):

W. C. Heraeus G.m.b.H. und Co. K.-G., Germany

SOURCE: P

PCT Int. Appl., 12 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.			KII	MD	DATE			APPLICATION NO.					DATE				
WO	2000073540 A1 W: JP, US		1	20001207		W	WO 2000-EP4368				20000516							
		,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	
EP	1198	623		A.	1	2002	0424		E	P 20	00-9	2953	1	2000	0516			
ΕP	1198	623		B	1	2003	0319											
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	FI,	CY													•	
JP	2003	5005	50	T	2	2003	0107		J	P 20	01-5	0002	3	20000	0516			
AT	2349	49		E		2003	0415		А	T 20	00-9	2953	1	20000	0516			
PRIORITY	Y APP	LN.	INFO.	.:				]	DE 1	999-	1992	4895	Α	1999	0601			
								1	<b>VO</b> 2	000-	EP43	68	W	20000	0516			

- AB The invention relates to a method for producing a cyanide-free soln. of a Au compd. that is suitable for galvanic Au baths. The method comprises the following steps: (a) reacting a cysteine and/or a cysteinate with a tetrachloroauric acid and/or a tetrachloroauric salt in an aq. medium; (b) sepg. the resulting ppt. from the aq. medium; and (c) dissolving the obtained ppt. in a 2nd aq. medium, increasing the pH value to 12.0 to 14.0.
- 52-90-4DP, L-Cysteine, reaction products with tetrachloroauric acid, uses 16903-35-8DP, Tetrachloroauric acid, reaction products with cysteine or cysteinate

RL: NUU (Other use, unclassified); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)

(method for producing a cyanide-free soln. of a gold compd. that is suitable for galvanic gold baths)

RN 52-90-4 CAPLUS

CN L-Cysteine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 16903-35-8 CAPLUS

CN Aurate(1-), tetrachloro-, hydrogen, (SP-4-1)- (9CI) (CA INDEX NAME)

O H+

IT 52-90-4, L-Cysteine, reactions 16903-35-8,

Tetrachloroauric acid

RL: RCT (Reactant); RACT (Reactant or reagent) (method for producing a cyanide-free soln. of a gold compd. that is suitable for galvanic gold baths)

RN 52-90-4 CAPLUS

CN L-Cysteine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 16903-35-8 CAPLUS

CN Aurate(1-), tetrachloro-, hydrogen, (SP-4-1)- (9CI) (CA INDEX NAME)

○ H+

REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1996:573995 CAPLUS

DOCUMENT NUMBER:

125:208337

TITLE:

Silver halide photographic emulsion containing sulfur

and selenium or tellurium compounds to improve

speed/fog ratio

INVENTOR(S):

Mifune, Hiroyuki; Morimura, Kimyasu; Sasaki, Hirotomo

PATENT ASSIGNEE(S):

Fuji Photo Film Co Ltd, Japan Jpn. Kokai Tokkyo Koho, 29 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

SOURCE:

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
JP 08171167	A2	19960702	JP 1994-282066 19941116
US 5654134	А	19970805	US 1996-699186 19960819
PRIORITY APPLN. INFO.	:		JP 1994-253755 19941019
			JP 1994-104065 19940518
			US 1995-439518 19950511

OTHER SOURCE(S):

MARPAT 125:208337

GΙ

AB The photog. emulsion is chem. sensitized by a labile Se and/or labile Te compd. in presence of a sulfur compd. selected from (a) RISM, (b) R2SSR3 and (c) I (R1 = aliph. or arom. group; M = H, cation; R2, R3 = aliph. or arom. group, R2 and R3 may be combined to form a ring; R4-10 = H, aliph. group, arom. group, COOR11; R11 = H, aliph. group; R5 and R6, R7-10 may be combined to form rings). Preferably, the chem. sensitization is conducted by gold and/or sulfur sensitizer in addn. to the chalcogenide compd. The emulsion has high sensitivity, particularly for the radiation of spectrally sensitized wavelength, and low fog, reduced failure from reciprocity law, and good developability.

IT 52-90-4, L-Cysteine, uses 16903-35-8, Chloroauric acid RL: DEV (Device component use); USES (Uses)

(Ag halide photog. emulsion contg. sulfur and selenium or tellurium compds. to improve speed/fog ratio)

RN 52-90-4 CAPLUS

CN L-Cysteine (9CI) (CA INDEX NAME)

Ι

Absolute stereochemistry.

RN 16903-35-8 CAPLUS

CN Aurate(1-), tetrachloro-, hydrogen, (SP-4-1)- (9CI) (CA INDEX NAME)

O H+

L13 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:486927 CAPLUS

DOCUMENT NUMBER: 125:154179

TITLE: Remarks on the effect of the reducing substances in

photographic gelatins

AUTHOR(S): Szucs, M.; Csaplaros, J. CORPORATE SOURCE: Spectra Ltd., Vac, Hung.

SOURCE: Photographic Gelatin, Proceedings of the IAG

Conference, 6th, Fribourg, Sept. 1993 (1994), Meeting Date 1993, 195-204. Editor(s): Ammann-Brass, Hans;

Pouradier, Jacques. Internationale

Arbeitsgemeinschaft fuer Photogelatine: Fribourg,

Switz.

CODEN: 63DEAM Conference

DOCUMENT TYPE: Conferer LANGUAGE: English

AB The reducing effect of the photog. gelatins originates from the methionine and sugar content. It results in a sensitivity increase. In the weakly acidic pH range the sensitizing action is created through the redn. of silver/methionine complex by the reducing sugars. This process may be catalyzed by the ferric ion content of gelatins. In a strongly alk. medium the glucose or/and galactose is able directly to reduce the silver chloride and bromide. However, the reducing power of the gelatin may contribute only in a small extent to the sensitivity gain in a sulfur + gold + redn. sensitization, therefore its practical role is moderate.

IT 52-90-4, Cysteine, processes

RL: PEP (Physical, engineering or chemical process); PROC (Process) (additive effect of; effect of reducing substances in photog. gelatins)

RN 52-90-4 CAPLUS

CN L-Cysteine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 16903-35-8, Tetrachloroauric acid

RL: NUU (Other use, unclassified); USES (Uses)

(sensitizer; effect of reducing substances in photog. gelatins)

RN 16903-35-8 CAPLUS

CN Aurate(1-), tetrachloro-, hydrogen, (SP-4-1)- (9CI) (CA INDEX NAME)

O H+

L13 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1990:95110 CAPLUS

DOCUMENT NUMBER:

112:95110

TITLE:

Method and kit for reversibly staining immobilized and

enzymically-labeled nucleic acids using sulfur-containing substrates and metals

INVENTOR(S):

Lebacq, Philippe

PATENT ASSIGNEE(S):

Bioprobe Systems, Fr.

SOURCE:

Eur. Pat. Appl., 8 pp.
CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

French

LANGUAGE:

French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 334756	A1	19890927	EP 1989-400801	19890321
EP 334756	В1	19920624		
R: AT, BE,	CH, DE,	ES, FR,	GB, GR, IT, LI, LU, NL,	SE
FR 2629100	A1	19890929	FR 1988-3982	19880325
FR 2629100	B1	19930820		
FR 2680374	A1	19930219	FR 1989-3191	19890310
FR 2680374	B1	19931112		
AT 77654	E	19920715	AT 1989-400801	19890321
US 5073483	A	19911217	US 1989-328340	19890324
JP 02009400	A2	19900112	JP 1989-72017	19890327
PRIORITY APPLN. INFO	).:		FR 1988-3982	19880325
			FR 1989-3191	19890310
			EP 1989-400801	19890321

AΒ A method and kit for reversibly staining a nucleic acid sequence immobilized on a solid support comprises: (1) using an enzyme system (e.g. contg. alk. phosphatase) which is (in)directly bonded to the nucleic acid sequence as nonradioactive label; (2) reacting the enzyme with a S-contg. org. substrate to form a thiol group-contg. product; and (3) reacting the product with a metal (e.g. Au) compd. which is sol. and stable in an aq. soln. to form a pptd. metal-S-contg. org. compd. complex at the site of the nucleic acid sequence. The complex can be further reacted with a compd. to accentuate the coloration and/or with a decoloration soln. contg. Na2S2O3 and (NH4)2S2O3. A membrane-immobilized and alk. phosphatase-labeled nucleic acid was reacted with color developing soln. contg. pH 9.5 Tris-acetate 50, Mg acetate 10, cysteamine phosphate 5, and aurothioglucose 3 mM for 15 min - 2 h. HClO4 or AgNO3 was used to enhance the visualization, by changing the color from lemon yellow/gold yellow to chestnut brown. By this method, it is possible to detect 1 pg DNA in dot blot hybridization and visualize single genomic DNA sequence after Southern transfer.

 staining) RN 52-90-4 CAPLUS CN L-Cysteine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 16903-35-8

RL: ANST (Analytical study)

(in immobilized nucleic acid staining)

RN 16903-35-8 CAPLUS

CN Aurate(1-), tetrachloro-, hydrogen, (SP-4-1)- (9CI) (CA INDEX NAME)

⊕ H +

L13 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1963:85041 CAPLUS

DOCUMENT NUMBER: 58:85041
ORIGINAL REFERENCE NO.: 58:14615a-b

TITLE: The therapeutic or preventive effect of some

medicaments on nitroglycol-poisoned animals

AUTHOR(S): Yoshikawa, Hiroshi; Ishii, Michiko

SOURCE: Bull. Natl. Inst. Health (Kawasaki, Japan) (1962), No.

7, 1-6

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB Mice were given daily intraperitoneal injections of an 8% soln. of nitroglycol in olive oil 30 min. after the subcutaneous injection of either vitamin C (I), cysteine, glutathione, CuSO4, AgNO3, or HAuCl4 and survival times detd. CuSO4 was the most effective and I gave slight protection.

IT 16903-35-8, Hydrogen tetrachloroaurate(III)

(in protection against nitroglycol poisoning)

RN 16903-35-8 CAPLUS

CN Aurate(1-), tetrachloro-, hydrogen, (SP-4-1)- (9CI) (CA INDEX NAME)

● H+

Absolute stereochemistry.

L18 12 L17

36 L14

L19 12 L18 AND L14

=> d ibib abs hitstr 1-12

L19 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:768316 CAPLUS

DOCUMENT NUMBER: 130:69971

TITLE: Bath for displacement plating of gold

INVENTOR(S): Masaiki, Masashi; Takeuchi, Takao; Kobashi, Yasuto;

Kohata, Keigo; Mizumoto, Shozo; Nawafune, Hidemi

PATENT ASSIGNEE(S): Daiwa Kasei Kenkyusho K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 10317157 A2 19981202 JP 1997-137957 19970514
PRIORITY APPLN. INFO.: JP 1997-137957 19970514

OTHER SOURCE(S): MARPAT 130:69971

The bath contains (1) .gtoreq.1 Au source(s) selected from Au sulfite, Au chloride, Au thiosulfate, and Au complex or alkali metal or ammonium salts of Au compds. of YCH(SH)CHXCO2H (I; X = H, NH2, NHCOCH3; Y = H, CO2H; excluding X = Y = H); (2) .gtoreq.1 complexing agent(s) selected from alkali metal or ammonium salts of I; and (3) .gtoreq.1 complexing agent(s) for masking Ni selected from X1RCO2H (R = single bond, C1-4 alkylene with optional substitution of 1 to half of its H with OH and/or CO2H; X1 = H, CO2, CH2OH), [X2NY1CH(B)]2A, Y1NZX2 (X2 = CH2CO2H, C2H4CO2H; Y1 = CH2CO2H, C2H4CO2H, CH2OH; Z = CH2CO2H, C2H4CO2H, H; A = single bond, CH(OH), CH2N(CH2CO2H)CH2; B = H or may form satd. 6-membered ring with methylene when A is a single bond) or their alkali metal or ammonium salts. Optionally, the bath contains stabilizing agents. The baths are cyan-free.

IT 61701-34-6, Aurocysteine 165456-41-7

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(gold source; cyan-free baths for displacement plating of gold)

RN 61701-34-6 CAPLUS

CN Aurate(1-), [L-cysteinato(2-)]-, hydrogen (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 165456-41-7 CAPLUS

CN L-Cysteine, N-acetyl-, monogold(1+) salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## O Au(I)

L19 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1994:610980 CAPLUS

DOCUMENT NUMBER:

121:210980

TITLE:

Catalytic electroless gold coating baths

INVENTOR(S):

Kroll, Harry H.; Chevalier, Jean

PATENT ASSIGNEE(S):

Technic Inc., USA

SOURCE:

U.S., 5 pp.

DOCUMENT TYPE:

CODEN: USXXAM Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5338343	А	19940816	US 1993-96558	19930723
PRIORITY APPLN. INFO.	:		US 1993-96558	19930723

The baths comprise a water-sol. org. thiol Au(I) complex, and alkali metal AB cyanide, an alkali metal hydroxide, a borohydride reducing agent, and optionally a stabilizing agent. The baths deposit Au on a Au surface several times faster than the conventional electroless Au-coating baths based on  $KAu\left(CN\right)2$ . The use of the org. thiol  $Au\left(I\right)$  complex eliminates the buildup of inhibitory CN- ions as a result of replenishment.

**61701-34-6**, Aurocysteine

RL: TEM (Technical or engineered material use); USES (Uses) (catalytic electroless gold coating baths contq.)

RN 61701-34-6 CAPLUS

Aurate(1-), [L-cysteinato(2-)]-, hydrogen (9CI) (CA INDEX NAME) CN

## \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L19 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1993:501853 CAPLUS

DOCUMENT NUMBER:

119:101853

TITLE:

SOURCE:

Compositions and thiolates for forming precious metal films on substrates upon firing, and process for the

formation of the films and thiolates

INVENTOR(S): PATENT ASSIGNEE(S): Bishop, Peter Trenton Johnson Matthey PLC, UK Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
EP 514073	A2	19921119	EP 1992-304080	19920506			
EP 514073	A3	19930317					
EP 514073	B1	19950705					

R: AT, BE, DE, DK, ES, FR, GB, GR, IT, NL, PT, SE US 1992-875412 US 5281635 А 19940125 19920429 19920506 ES 2073866 Т3 19950816 ES 1992-304080 20000816 CZ 1992-1399 CZ 287025 В6 19920511 HU 61725 A2 19930301 HU 1992-1634 19920515 HU 215017 В 19980828 JP 05163576 A2 19930629 JP 1992-123289 19920515 JP 3119390 В2 20001218 PL 168425 В1 19960229 PL 1992-294563 19920515 RU 2127748 C1 19990320 RU 1992-5011810 19920515 CN 1066863 Α 19921209 CN 1992-103903 19920516 CN 1032058 В 19960619 US 5401535 А 19950328 US 1993-155827 19931123 US 5744245 19980428 US 1995-383219 Α 19950203 US 6013798 US 1998-9126 20000111 Α 19980120 PRIORITY APPLN. INFO.: A 19910517 GB 1991-10757 A 19910719 GB 1991-15621 A3 19920429 US 1992-875412 CS 1992-1399 A 19920511 US 1993-155827 A3 19931123 US 1995-383219 A3 19950203

OTHER SOURCE(S): MARPAT 119:101853

The compns. contain a polymeric resin and a 3-22-wt.% soln., in a water-solvent mixt., of a thiolate of .gtoreq.1 of Pt, Pd, Au, and Ag. Upon drying and heating these compns. on a substrate, the water evaps. to leave a soln. of the resin and thiolate in the solvent, then the solvent evaps. to leave a soln. of the thiolate in the resin, and then the thiolate decomps. to give the precious metal as the resin volatilizes. These compns. are esp. suitable for decorating glass and ceramic articles. A compn. consisting of polymethacrylic resin 10, N-(2-mercaptopropionyl)glycine gold(I) (prepn. presented) 18.5 (Au 10 wt. parts), 1,3-propane diol 15, water 40, Me2CHOH 15, N(Et)3 1, Rh complex 0.05, and Cr complex 0.05 gave a bright, adherent film.

IT 95014-25-8 148537-29-5

RL: USES (Uses)

(compns. contg. water and cosolvent and binder and, for decorative pattern formation ceramics and glass by firing)

RN 95014-25-8 CAPLUS

CN Aurate(1-), [N-acetyl-L-cysteinato(2-)-O1,S3]-, sodium (9CI) (CA INDEX NAME)

### Na +

RN 148537-29-5 CAPLUS

CN Aurate(2-), [N-(N-L-.gamma.-glutamyl-L-cysteinyl)glycinato(3-)]-, dihydrogen (9CI) (CA INDEX NAME)

O2 H+

ΙΤ 148568-27-8

RL: USES (Uses)

(compns. contg. water and cosolvent and binder and, for decorative pattern formation on ceramics and glass by firing)

RN 148568-27-8 CAPLUS

Aurate(1-), [L-cysteinato(2-)-0,S]-, hydrogen (9CI) (CA INDEX NAME) CN

O H+

L19 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1984:400143 CAPLUS

DOCUMENT NUMBER:

101:143

TITLE:

Bovine serum albumin-gold thiomalate complex:

gold-197 Moessbauer, EXAFS and XANES, electrophoresis,

sulfur-35 radiotracer, and fluorescent probe

competition studies

AUTHOR(S):

Shaw, C. Frank, III; Schaeffer, N. A.; Elder, R. C.; Eidsness, M. K.; Trooster, Jan M.; Calis, Gijs H. M. Dep. Chem., Univ. Wisconsin, Milwaukee, WI, 53201, USA

CORPORATE SOURCE: SOURCE:

Journal of the American Chemical Society (1984),

106(12), 3511-21

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE:

LANGUAGE:

Journal English

197Au Moessbauer spectroscopy and XANES (x-ray absorption near edge AΒ spectroscopy) and EXAFS were applied to Au-protein complexes, and the coordination geometry and oxidn. state of Au in the albumin-Au thiomalato (I) [4846-27-9] complex was assigned unambiguously by the combination of both techniques. A no. of models for the strong- and weak-binding sites in the complexes formed between albumin and I were proposed and tested by a no. of std. protein chem. techniques. Au at the weak- and strong-binding sites is Au(I) coordinated by 2 S ligands. The weakly bound Au atoms will vary with the exptl. procedures employed to prep. the complex. The concn. of albumin in serum is 590 .mu.M, whereas Au during chrysotherapy (the Au-based treatment of rheumatoid arthritis) rarely exceeds 50 .mu.M, indicating that Au binds tightly to the cysteinyl-34 site.

ΤT 74921-06-5 RL: PRP (Properties)

(Moessbauer spectra of)

RN 74921-06-5 CAPLUS

CN Aurate(1-), [L-cysteinato(2-)-N,O,S]-, hydrogen (9CI) (CA INDEX NAME)

O H+

IT 89827-22-5P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and Moessbauer spectrum of)

RN 89827-22-5 CAPLUS

Absolute stereochemistry.

$$HO_2C$$
 $N$ 
 $H$ 
 $NH_2$ 
 $S$ 
 $CO_2H$ 

O Au(I)

L19 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1983:528198 CAPLUS

DOCUMENT NUMBER:

99:128198

TITLE:

Gold-197 Moessbauer studies of some gold(I) thiolates

and their phosphine complexes including certain

antiarthritic gold drugs

AUTHOR(S):

Hill, David T.; Sutton, Blaine M.; Isab, Anvar A.; Razi, M. Tahir; Sadler, Peter J.; Trooster, Jan M.;

Calis, Gijs H. M.

CORPORATE SOURCE:

Dep. Med. Chem., Smith Kline and French Lab.,

Philadelphia, PA, 19101, USA

SOURCE:

Inorganic Chemistry (1983), 22(20), 2936-42

CODEN: INOCAJ; ISSN: 0020-1669

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Structural information on 11 gold(I) thiolates and 12 phosphine-coordinated gold(I) thiolates was collected by using 197Au Moessbauer spectroscopy. The compds. studied include the injectable antiarthritic drugs gold sodium thiomalate [12244-57-4], gold thioglucose [12192-57-3], gold sodium thiosulfate [10233-88-2], and the orally effective (phosphine)gold(I) thiolate auranofin [34031-32-8]. Isomer

shifts and quadrupole coupling consts. indicate that gold atoms in the 1:1 thiolates are S bonded and 2-coordinate. These compds. are polymeric in the solid state. This information complements previous soln. studies. The Moessbauer spectra of the (phosphine)gold complexes are characteristic and consistent with a monomeric linear SAuP linkage. The spectral parameters (isomer shift and quadrupole splitting) of the phosphine complexes are approx. 2 mm s-1 larger than those of the comparable thiolates. The structural and biol. significance of these data are discussed.

IT 65286-35-3

RL: PRP (Properties)

(gold-197 Moessbauer spectroscopy of)

RN 65286-35-3 CAPLUS

CN Aurate(1-), [L-cysteinato(2-)-S]-, hydrogen (9CI) (CA INDEX NAME)

● H+

IT 86421-40-1P 86421-42-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and gold-197 Moessbauer spectroscopy of)

RN 86421-40-1 CAPLUS

CN Aurate(1-), [N-acetyl-L-cysteinato(2-)-.kappa.S]-, sodium (9CI) (CA INDEX NAME)

• Na+

RN 86421-42-3 CAPLUS

CN Aurate(1-), [N-acetyl-L-cysteinato(2-)-S](triethylphosphine)-, hydrogen (9CI) (CA INDEX NAME)

● H+

L19 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1982:537697 CAPLUS

DOCUMENT NUMBER: 97:137697

TITLE: (L-Cysteinato) gold(I)

AUTHOR(S): Shaw, C. Frank, III; Schmitz, Gerard P.

CORPORATE SOURCE:

Dep. Chem., Univ. Wisconsin, Milwaukee, WI, 53201, USA

SOURCE:

Inorganic Syntheses (1982), 21, 31-3

CODEN: INSYA3; ISSN: 0073-8077

DOCUMENT TYPE:

Journal

English

LANGUAGE:

The procedure is described for the prepn. of AuL (HL = L-cysteine) from

KAuBr4 and HL in the presence of HBr.

74921-06-5P ΙT

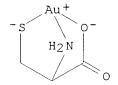
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, from potassium tetrabromoaurate(1-) and cysteine in

presence of hydrogen bromide)

74921-06-5 CAPLUS RN

Aurate(1-), [L-cysteinato(2-)-N,O,S]-, hydrogen (9CI) (CA INDEX NAME) CN



#### O H+

L19 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1981:551161 CAPLUS

DOCUMENT NUMBER: TITLE:

95:151161 S-Auro-N-(2-aurothio-2-methylpropanoyl)-L-cysteine

PATENT ASSIGNEE(S):

Santen Pharmaceutical Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 2 pp. CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 56045487 JP 61047840		19810425 19861021	JP 1979-122357	19790922
PRIO	RITY APPLN. INFO.			1979-122357	19790922
AB	The title compd.	(I),	useful as anti-	rheumatic remedy	(no data), was
					th 12.3 g AuCN in
					ich was treated with
	0.2 N NaOH in Etc				
IT	79269-97-9P				
	RL: RCT (Reactan	t); SP	N (Synthetic pr	eparation); PREP	(Preparation); RACT
	(Reactant or rea		•	, ,	, , , , , , , , , , , , , , , , , , ,
	(prepn. and d	- ebenzo	ylation of)		
RN	79269-97-9 CAPL		· ,		

CN Aurate (1-), [N-[2-(benzoylthio)-2-methyl-1-oxopropyl]-L-cysteinato <math>(2-)-O1,S3]-, hydrogen (9CI) (CA INDEX NAME)

⊕ H +

#### ΙT 79269-98-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, with gold cyanide)

79269-98-0 CAPLUS RN

 $Aurate (1-), \quad [N-(2-mercapto-2-methyl-1-oxopropyl)-L-cysteinato (2-)-O1,S3]-, \\$ CN hydrogen (9CI) (CA INDEX NAME)

⊕ H+

#### IT 79270-16-9P 79299-66-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

RN

79270-16-9 CAPLUS
Aurate(1-), [.mu.-[N-(2-mercapto-2-methyl-1-oxopropyl)-L-cysteinato(3-)-CNON, SN:O1, S3]]di-, hydrogen (9CI) (CA INDEX NAME)

● H+

79299-66-4 CAPLUS RN

 $\texttt{Aurate(1-), [.mu.-[N-(2-mercapto-2-methyl-1-oxopropyl)-L-cysteinato(3-)-L-cysteinato(3$ CN

O Na+

IT 74921-06-5

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with isobutyryl chloride deriv.)

RN 74921-06-5 CAPLUS

CN Aurate(1-), [L-cysteinato(2-)-N,O,S]-, hydrogen (9CI) (CA INDEX NAME)

O H+

L19 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1980:542138 CAPLUS

DOCUMENT NUMBER: 93:142138

TITLE: Some complexes of thiomalate with bivalent transition

metal ions and gold(I)

AUTHOR(S): Larkworthy, L. F.; Sattari, D.

CORPORATE SOURCE: Dep. Chem., Univ. Surrey, Guildford, GU2 5XH, UK

SOURCE: Journal of Inorganic and Nuclear Chemistry (1980),

42(4), 551-9

CODEN: JINCAO; ISSN: 0022-1902

DOCUMENT TYPE: Journal LANGUAGE: English

Thiomalic acid (LH3) complexes M1[ML].nH2O (M1 = Li, Na, K; M = Co, Fe, Mn, Ni; n = 1-3), M(LH).nH2O (M = Co, Fe, Mn; n = 2, 3), Ni(LH2)2.2H2O, Au(LH2), Na2[AuL], Ca[AuL].2H2O, and Ba[AuL].H2O were prepd. and characterized by anal., electronic and IR spectroscopy, and magnetic property measurements. The bivalent ions are octahedrally coordinated and the thiomalate is triply ionized. Ni(LH2)2.2H2O is monomeric but most of the other complexes are polymeric. Mn(LH).2H2O and Fe(LH).3H2O are antiferromagnetic and ferromagnetic, resp. Au(LH2) reacted with cysteine and glutathione to release some of the thiomalic acid and form mixed ligand complexes. Further reaction with these amino acids and reaction with Et2NCS2Na released all the thiomalic acid.

IT 74921-06-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
74921-06-5 CAPLUS
Aurate(1-), [L-cysteinato(2-)-N,O,S]-, hydrogen (9CI) (CA INDEX NAME)

-s Au<sup>+</sup> o-H<sub>2</sub>N

RN

CN

○ H+

AUTHOR(S):

L19 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1979:568131 CAPLUS

DOCUMENT NUMBER: 91:168131

TITLE: Bis(L-cysteinato)gold(I): chemical characterization

and identification in renal cortical cytoplasm
Shaw, C. Frank, III; Schmitz, G.; Thompson, H. O.;

Witkiewicz, P.

CORPORATE SOURCE: Dep. Chem., Univ. Wisconsin, Milwaukee, WI, 53201, USA

SOURCE: Journal of Inorganic Biochemistry (1979), 10(4),

317-30

CODEN: JIBIDJ; ISSN: 0162-0134

DOCUMENT TYPE: Journal LANGUAGE: English

L-Cysteinatogold(I) [61701-34-6] was synthesized by the reaction of L-cysteine-HCl [52-89-1] with KAuBr4 in acidic media and its soly. was detd. from pH 4 to 10. The soly. at pH 7.4 and 37.degree. was 1 .mu.M. In the presence of excess cysteine, the soly. increased because of the formation of bis(L-cysteinato)gold(I) [71547-19-8]. The equil. const. for formation of the bis complex was 2.1 .times. 10-3, which at pH 7.4 corresponds to an apparent formation const. of 4.4 .times. 104. The formation of the bis adduct was confirmed by chromatog, sepn. of the products of the reaction between [35S]-L-cysteine and Na2Au thiomalate (Na2AuTM) [16905-00-3]. This complex elutes with Kav = 1.15 which allows it to be distinguished from other Au thiolates that might form in vivo. The bis(cysteinato)gold(I) complex was in kidney cytosol isolated from rats given Na2AuTM in vivo. When addnl. cysteine was added to the cytosol in vitro, the peak at 1.15 increased, but if glutathione was added, the low mol. wt. Au eluted at Kav = 1.00, which was taken as evidence for the existence of bis(cysteinato)gold(I) in the cytosol prepn. The amt. of Au present as bis(cysteinato)gold(I) after 4 different dose schedules was measured and found to increase with the total cytosol Au concn. L-Cysteinatogold(I) did not dissolve in the presence of bovine serum albumin to form an adduct.

IT 61701-34-6P

RN 61701-34-6 CAPLUS

CN Aurate(1-), [L-cysteinato(2-)]-, hydrogen (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 71547-19-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, gold sodium thiomalate metabolite of kidney in relation to)

RN 71547-19-8 CAPLUS

CN Aurate(3-), bis[L-cysteinato(2-)-N,S]-, trihydrogen (9CI) (CA INDEX NAME)

**⊙**3 H<sup>+</sup>

L19 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1978:435652 CAPLUS

DOCUMENT NUMBER: 89:35652

TITLE: Gold complexes of L-cysteine and D-penicillamine

AUTHOR(S): Brown, Donald H.; McKinley, Gordon C.; Smith, W. Ewen

CORPORATE SOURCE: Dep. Pure Appl. Chem., Univ. Strathclyde, Glasgow, UK SOURCE: Journal of the Chemical Society, Dalton Transactions:

Inorganic Chemistry (1972-1999) (1978), (3), 199-201

CODEN: JCDTBI; ISSN: 0300-9246

DOCUMENT TYPE: Journal LANGUAGE: English

AB Seven Au(I) and Au(III) complexes of L-cysteine and D-penicillamine were prepd. from Au(0), -(I), and -(III) salts. In the presence of Cl- ions, L-cysteine formed Au(I) complexes and D-penicillamine formed Au(III) complexes. In the presence of PPh3, only Au(I) complexes were obtained. UV-visible and Cotton effect spectra of the complexes were detd.

IT 61701-34-6P 69121-29-5P 69121-30-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

RN 61701-34-6 CAPLUS

CN Aurate(1-), [L-cysteinato(2-)]-, hydrogen (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 69121-29-5 CAPLUS

O H+

O Na+

**0**3 H<sub>2</sub>O

RN69121-30-8 CAPLUS

Aurate(1-), [L-cysteinato(2-)-S](triphenylphosphine)-, hydrogen, CN dihydrochloride (9CI) (CA INDEX NAME)

$$^{\rm NH_2}_{\rm -O_2C-CH-CH_2-S-Au^+PPh_3}$$

O<sub>2</sub> HCl

О н+

L19 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1978:43288 CAPLUS

DOCUMENT NUMBER: 88:43288

TITLE: Electronic and circular dichroism spectra of gold(I)

complexes having sulfur- and phosphorus-containing

ligands

AUTHOR(S): Brown, Donald H.; McKinlay, Gordon; Smith, W. Ewen

CORPORATE SOURCE: Dep. Pure Appl. Chem., Univ. Strathclyde, Glasgow, UK SOURCE: Journal of the Chemical Society, Dalton Transactions:

Inorganic Chemistry (1972-1999) (1977), (19), 1874-9

CODEN: JCDTBI; ISSN: 0300-9246

DOCUMENT TYPE: Journal

LANGUAGE: English

Electronic and CD spectra were studied of AuX(PR3) (R = Ph, Et; X = Cl, L-cysteinate, D-penicillaminate, thiomalate) and of Au(I) complexes with the S ligands alone. At 33,000-50,000 cm-1 the spectra are complex and dominated by transitions arising from MOs located mainly on the PR3 and Au moieties. At lower energies, spectra due to S to Au transitions are obsd. which form a consistent pattern characteristic of this type of bond. These studies are of interest in relation to the therapeutic activity of linear Au(I) complexes with soft ligands.

14243-49-3 65286-35-3 65705-25-1 ΙT

RL: PRP (Properties)

(CD and UV spectra of)
RN 14243-49-3 CAPLUS
CN Aurate(1-), [L-cysteinato(2-)-.kappa.S](triethylphosphine)-, hydrogen (9CI) (CA INDEX NAME)

① H+

RN 65286-35-3 CAPLUS CN Aurate(1-), [L-cysteinato(2-)-S]-, hydrogen (9CI) (CA INDEX NAME)

O H+

$$^{\rm NH_2}_{\rm -O_2C-CH-CH_2-S}^{\rm -Au} + _{\rm PPh_3}$$

· O H+

L19 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1977:100779 CAPLUS

DOCUMENT NUMBER: 86:100779

TITLE: The interaction of aurothiomalate and cysteine

AUTHOR(S): Danpure, Christopher J.

CORPORATE SOURCE: Clin. Res. Cent., Med. Res. Counc., Harrow, UK SOURCE: Biochemical Pharmacology (1976), 25(21), 2343-6

CODEN: BCPCA6; ISSN: 0006-2952

DOCUMENT TYPE: Journal LANGUAGE: English

AB Na aurothiomalate (I) [12244-57-4] (10-2M) and cysteine-HCl [52-89-1] (10-2M) reacted to produce an insol. complex of aurocysteine [61701-34-6]. The ppt. of aurocysteine decreased on addn. of excess I and formation of the complex was pH-dependent, the rate of formation falling as the pH was raised above 5. The reaction was blocked by alkylation of the SH group of cysteine but organomercurials had no effect on complex formation. The reaction of I with cysteine appears to be analogous to the reaction between I and human serum albumin.

IT 61701-34-6

=>

> s C6 H10 Au N2 O4 S2 . 3 H/mf L15 1 C6 H10 AU N2 O4 S2 . 3 H/MF

=> d

L15 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 71547-19-8 REGISTRY

CN Aurate(3-), bis[L-cysteinato(2-)-N,S]-, trihydrogen (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES:

CN L-Cysteine, gold complex

MF C6 H10 Au N2 O4 S2 . 3 H

CI CCS

LC STN Files: CA, CAPLUS

●3 H+

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

ACCESSION NUMBER: 2000:861875 CAPLUS

DOCUMENT NUMBER: 134:34356

TITLE: Method for producing a cyanide-free solution of a gold

compound that is suitable for galvanic gold baths

WO 2000-EP4368 W 20000516

INVENTOR(S): Hoffacker, Gerhard; Franz, Renate; Reitz, Ramona;

Walter, Richard

PATENT ASSIGNEE(S): W. C. Heraeus G.m.b.H. und Co. K.-G., Germany

SOURCE: PCT Int. Appl., 12 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.			KI	ИD	DATE		APPLICATION NO.					DATE					
	WO	2000073540			A	1	2000	1207	WO 2000-EP4368 20000516									
		W: RW:	JP, AT, PT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,
		1198 1198	623	51		_	2002			El	P 20	00-9	2953	1	2000	0516		
	C.F		AT,		CH,	_			FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
	TD	2003	•	FI,	CY T.	2	2003	0107		TI	D 20	01_5	0002:	2	2000	0516		
		2349		J 0	E		2003						2953:		20000			
PRIO:	RIT	Y APP	LN.	INFO	.:					DE 19	999-	1992	4895	Α	19990	0601		

AB The invention relates to a method for producing a cyanide-free soln. of a Au compd. that is suitable for galvanic Au baths. The method comprises the following steps: (a) reacting a cysteine and/or a cysteinate with a tetrachloroauric acid and/or a tetrachloroauric salt in an aq. medium; (b) sepg. the resulting ppt. from the aq. medium; and (c) dissolving the obtained ppt. in a 2nd aq. medium, increasing the pH value to 12.0 to 14.0.

52-90-4DP, L-Cysteine, reaction products with tetrachloroauric acid, uses 16903-35-8DP, Tetrachloroauric acid, reaction products with cysteine or cysteinate

RL: NUU (Other use, unclassified); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)

(method for producing a cyanide-free soln. of a gold compd. that is suitable for galvanic gold baths)

RN 52-90-4 CAPLUS

CN L-Cysteine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 16903-35-8 CAPLUS

CN Aurate(1-), tetrachloro-, hydrogen, (SP-4-1)- (9CI) (CA INDEX NAME)

O H+

IT 52-90-4, L-Cysteine, reactions 16903-35-8,

Tetrachloroauric acid

RL: RCT (Reactant); RACT (Reactant or reagent)

(method for producing a cyanide-free soln. of a gold compd. that is suitable for galvanic gold baths)

RN 52-90-4 CAPLUS

CN L-Cysteine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 16903-35-8 CAPLUS

CN Aurate(1-), tetrachloro-, hydrogen, (SP-4-1)- (9CI) (CA INDEX NAME)

О н+

REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT